DESCRIPTION

Essential technical information for building on expansive soils--complete with practical, proven design methods.

Expansive Soils examines factors that influence the design of foundations and pavements built on expansive soils, and explores key design procedures and remedial measures that address these factors effectively. Backed by the authors' extensive research and experience --including interviews with practicing engineers working with expansive soils--this authoritative volume is an important reference text for geotechnical and foundation engineers, geologists, construction professionals, and students.

Easy to understand and apply, Expansive Soils contains:

* Site investigation techniques for identification and classification of expansive soils

* Heave prediction methods using different types of data --with rigorous treatment of soil suction theory and measurement, oedometer tests, and more

* Alternative design procedures for drilled pier and slab-on-grade foundations, highway and airfield pavements

* Treatment and chemical stabilization techniques --including salt treatment; moisture barriers; lime and cement stabilization; and other procedures

* Remedial measures such as drainage control, and removal with replacement and compaction control
* Sample problems illustrating practical applications.

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